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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,320

07/25/2005

Birger Hansson

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MERCHANT & GOULD PC

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MINNEAPOLIS, MN 55402-0903

EXAMINER

CULLER, JILL E

ART UNIT

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2854

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DELIVERY MODE

09/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,320	Applicant(s) HANSSON ET AL.	
	Examiner JILL E. CULLER	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,299,495 to Schoeps et al. in view of U.S. Patent No. 5,040,457 to Lin.

With respect to claim 1, Schoeps et al. teaches a method for keeping a number of spray nozzles, 7, in a printing press spray beam clean, wherein air with a certain flow rate is supplied to separate covers, each separate cover surrounding a single spray nozzle and having an opening for a spray cone from the spray nozzle, wherein the air flow rate is controlled by means of a throttling device connected to each separate cover, and wherein the air flow is low enough not to disturb the spray from the nozzle. See column 3, lines 21-24 and column 4, lines 19-23 and lines 54-59.

Schoeps et al. does not explicitly teach that the opening is constructed to not disturb the spray from the nozzle. Although the term disturb has a broad definition, it is acknowledged that Schoeps et al. teaches the openings are covered by screens and therefore one having ordinary skill in the art would likely consider the spray to be disturbed as it passed through these screens.

Lin teaches spray nozzles in a printing press spray beam wherein an opening for a spray cone from the spray nozzle is constructed so as not to disturb the spray from the nozzle. See column 3, lines 4-19 and Fig. 2.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the spray nozzles of Schoeps et al. to have openings which do not disturb the spray from the nozzle, as taught by Lin, in order to allow the spray to leave the spray beam more smoothly.

With respect to claim 2, Schoeps et al. teaches a device for keeping a number of spray nozzles, 7, in a printing press spray beam clean, each spray nozzle being surrounded by a separate cover comprising an opening for a spray cone from the spray nozzle, wherein each cover is connected to air flow control means, each air flow control means comprising a throttling device that restricts the air flow enough to leave the spray cone undisturbed. See column 3, lines 21-24 and column 4, lines 19-23 and lines 54-59.

Schoeps et al. does not explicitly teach that the opening is constructed to not disturb the spray from the nozzle. Although the term disturb has a broad definition, it is acknowledged that Schoeps et al. teaches the openings are covered by screens and therefore one having ordinary skill in the art would likely consider the spray to be disturbed as it passed through these screens.

Lin teaches spray nozzles in a printing press spray beam wherein an opening for a spray cone from the spray nozzle is constructed so as not to disturb the spray from the nozzle. See column 3, lines 4-19 and Fig. 2.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the spray nozzles of Schoeps et al. to have openings which do not disturb the spray from the nozzle, as taught by Lin, in order to allow the spray to leave the spray beam more smoothly.

With respect to claims 3 and 4, Schoeps et al. teaches that the opening in the cover has the form of a slot and each cover is provided with a drainage hole. See column 4, lines 54-66 and Fig. 1.

With respect to claim 5, Schoeps et al. teaches an external air conduit, 17, connected to the covers. See column 3, lines 54-56.

With respect to claim 8, Schoeps et al. teaches each cover is formed as a short sleeve connected to a spray valve cap and having an end plate, 12, 13, attached to its end remote from the spray nozzle, the end plate being provided with the opening. See column 3, lines 27-38 and Fig. 2.

3. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoeps et al. in view of Lin, as applied to claims 1-5 and 8 above, and further in view of U.S. Patent No. 2,448,226 to Marsden.

Schoeps et al. and Lin teach all that is claimed, as in the above rejection of claims 1-5 and 8, except that a spray valve for the spray nozzle is provided with an internal air conduit and an air bore connected to the cover, wherein the air bore has such a diameter that a throttling effect is obtained.

Marsden teaches a spray valve for a spray nozzle, G, provided with an internal air conduit, 45, and an air bore, 46, connected to the cover, wherein the air bore has such a diameter that a throttling effect is obtained. See column 4, lines 45-62 and Fig. 3.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the apparatus of Schoeps et al. to have the internal air conduit and air bore of Marsden in order to better control the direction of the air flow into the cover.

Response to Arguments

4. Applicant's arguments filed May 12, 2008 have been fully considered but they are not persuasive.

In response to applicant's argument that Schoeps et al. does not teach or suggest separate covers wherein each cover surrounds a single spray nozzle, Schoeps et al. recites, as applicant quotes, a plurality of fan spray nozzle devices carried in a housing or housings. The recitation of a plurality of housings indicates that there may be a separate housing for each nozzle device and therefore the reference is considered to teach the requirements of the claim.

In response to applicant's argument that Lin does not disclose an opening constructed not to disturb the spray from the nozzle because Lin teaches spray shields, 10, 11, which confine the spray from the nozzles, the interaction of these spray shields with the spray from the nozzles would not appear to qualify as a disruption as defined by applicant's disclosure. It can be seen in Figs. 3-4 of the present invention that the

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spray, released from the nozzle, 3, then passes through an opening 16 or 26. As applicant's claims indicate that these openings are not considered to disrupt the flow of the spray, it would appear that the spray shields of Lin, which are at a considerably greater distance from the nozzle opening should also be considered not to disrupt the flow of the spray.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JILL E. CULLER whose telephone number is (571)272-2159. The examiner can normally be reached on M-F 10:00-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jec

/Jill E. Culler/

Primary Examiner, Art Unit 2854